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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,389	06/28/2001	Claude Chapel	PF980093	4273

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EXAMINER	
SHIBRU, HELEN	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/869,389	CHAPEL ET AL.	
	Examiner	Art Unit	
	SHIBRU HELEN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *06/28/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-11, 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakase (US Pat. No. 5,742,361).

Regarding claim 1, Nakase discloses a digital video reception device (see fig. 1 and col. 9 lines 38-43), comprising:

means of reception and of demultiplexing of audio and video packets from a multiplexed digital stream (see fig. 7 TS demultiplexer (1) and col. 15 line 66- col. 16 line 4),

a first video writing memory for accumulating a predetermined quantity of demultiplexed video packets (see fig. 7 video decoder (2), memory (5) and col. 9 lines 47-48, col. 10 lines 59-64 and col. 16 lines 34-39),

a second audio writing memory for accumulating demultiplexed audio packets (see fig. 7 video decoder (2), memory (5) and col. 9 lines 53-54, col. 11 lines 2-10),

means of storage of the multiplexed audio and video packets in the form of blocks, each block comprising a first area for recording the video packets and of fixed size equal to said predetermined quantity, and a second area for recording for audio packets and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining the predetermined quantity of video data (see col. 13 lines 47-67 and col. 14 lines 12-21, 39-44).

Regarding claim 2, Nakase discloses means of storage further comprises a first partition for a mainly random access and implementing multiple indirect addressing (see col. 9 lines 62-col. 10 line 15. The DMA is effected by the analyzing processing unit (105) by means of interruption), and a second partition reserved for audio and video stream recording for a mainly sequential access and implementing simple indirect addressing (see col. 10 lines 50-54, the audio and video are selected in the order of packet arraival).

Regarding claim 4, Nakase discloses the size of a block of the second partition is larger by at least an order of magnitude than the size of a block of the first partition (see col. 11 lines 44-60 and col. 12 lines 55-65. The audio and video packets are transferred from the FIFO 211 in fig. 3).

Regarding claim 5, Nakase discloses a third memory (audio transfer unit (106) and memory (104) in fig. 1) for reading video data from the storage means and a fourth memory (audio transfer unit (107) and memory (104) in fig. 1) for the reading of audio data, the respective sizes of the third and fourth memories, video and audio reading respectively, being equal to the sizes of the first and second memories, video and audio writing respectively (see col. 10 line 55-col. 11 line 6).

Regarding claim 6, Nakase discloses a writing memory for transmitting data to the storage means, which memory is organized as an area comprising N video writing memories of FIFO type and an audio writing area comprising a memory of FIFO type having the size of N audio writing memories (see col. 10 lines 15-20, col. 12 lines 25-31, col. 12 lines 41-45),

means for controlling the transfer of video data to a first of the N video writing memories and of audio data to the audio writing area, the transfer of video data being continued to a next video writing memory when said first of the N video writing memories is full (see col. 9 lines 62-67 and col. 10 lines 50-58);

means for storing the location, in the area for recording audio data, of the audio data corresponding to each of the N video writing memories (see col. 10 line 59-col. 11 line 5).

Regarding claim 7, Nakase discloses initiating the transfer of video and audio data stored in said writing memory to the storage means as soon as one of the N video writing memories has been filled (see col. 10 lines 24-36 and col. 11 lines 11-23).

Regarding claim 8, Nakase discloses a reading memory for receiving data from storage means, which memory is organized as an area comprising N video reading memories of FIFO type and an audio reading area comprising a memory of FIFO type having the size of N audio reading memories (see col. 10 lines 50-59),

means for controlling the transfer of video data to a first of the N video reading memories and of audio data to the audio reading area, the transfer of video data being continued to a next video reading memory when said first of the N video reading memories is full (see col. 9 lines 62-67 and 10 lines 37-49);

means for storing the location, in the area for reading audio data, of the audio data corresponding to each of the N video reading memories (see col. 10 line 59-col. 11 line 5).

Regarding claim 9, Nakase discloses initiating the transfer of video and audio data stored in said reading memory to a decoder of said data when the set of N video reading memories has been filled (see col. 10 lines 24-36, col. 11 lines 11-23).

Regarding claim 10, Nakase discloses the audio and video data are recorded in compressed form (see col. 9 lines 38-44).

Regarding claim 11, Nakase discloses a process for recording audio and video data in a digital television receiver (see TS in fig. 1 and col. 9 lines 38-43), comprising the steps of:

demultiplexing audio and video packets relating to one and the and video data in a digital television same program (see col. 13 lines 16-26),

simultaneous accumulation of the demultiplexed video data in a first memory and of the demultiplexed audio data in a second memory (see col. 13 lines 56-67 and col. 14 lines 39-44);

stopping the accumulation in said memories following the obtaining of a predetermined quantity of video data in said first memory (col. 14 lines 12-21);

recording of the video data accumulated in said first memory and of the audio data accumulated in the second memory respectively in a first area of a block whose fixed size is equal to said predetermined quantity and in a second area of this block, the size of this second area being fixed and chosen in such a way that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining said predetermined quantity of video data (see col. 13 lines 47-67 and col. 14 lines 12-21, 39-44).

Regarding claim 13, Nakase discloses further comprising the step of recording in each block of a data item indicating the quantity of audio data recorded in this block (see col. 12 lines 8-14 the invalid packets are chosen and discarded).

Regarding claim 14, Nakase discloses the recorded audio and video data are elementary stream packets, with the exclusion of information emanating from the transport layer (see fig. 1 video (106) and audio (107) and col. 9 lines 48-55).

Regarding claim 15, Nakase discloses an audio and video data recording device, wherein it comprises a partition comprising a plurality of logic blocks organized in series and each comprising a first area of fixed size for the recording of video data, and a second area for the recording of audio data and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while accumulating a predetermined quantity of video data, said predetermined quantity being equal to the size of said first area (see col. 10 line 55-col. 11 line 6, col. 14 lines 12-21, 39-44 and 47-67).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakase.

Regarding claim 3, although Nakase does not specifically teach that the size of a block of the second partition is larger by at least an order of magnitude than the size of a

block of the first partition, Nakase discloses analyzing processing unit is formed by the CPU (see col. 10 lines 31-44). Nakase further discloses if the packet is audio or video the packet buffer number, kind information and location of the data are included (see col. 10 lines 43-49). Official Notice is given that it is well known in the art to increase the size of the second partition by at least an order of magnitude than the size of the first partition. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nakase by increasing the size of the second partition in order to analyze the data stored effectively (see col. 18 lines 21-32).

Regarding claim 12, although Nakase does not specifically disclose the ratio of the sizes of the first and second areas is such that it is greater than or equal to the maximum ratio of the bit rate of video data and of the bit rate of audio data in the digital stream, Nakase does teach a demultiplexer process capable of executing a high bit rate and complicated header structure (see col. 18 lines 50-60 and col. 19 lines 4-8). Official Notice is given that it is well known in the art that the ratio of the sizes of the first and second areas are greater than or equal to the maximum ratio of the bit rate of video and audio data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nakase that the ratio of the sizes of the first and second areas is greater than or equal to the maximum ratio of the bit rate of video data and of the bit rate of audio data in the digital stream in order to provide a low-cost data.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gushima (US Pat. No. 5,506,825) discloses the areas of audio and video signal.

Artieri (US Pat. No. 6,104,751) discloses the partition of the TS packets.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIBRU, HELEN whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, NGOC Y. VU can be reached on 571 272 7329. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen Shibru
September 19, 2005

NGOC YEN VU
PRIMARY EXAMINER